# Some Notes on the Distribution of Cinura in the Vicinity of Claremont, with Description of a New Species

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Most of the specimens were found in the cauyons in the mountains north of Claremont. *Campodca* and *Japyx* were obtained from damp, decaying vegetation, under leaves and sticks and under rocks. Machilis and Lepisma were also found under leaves and stones, only in dryer places and under the bark of trees. All specimens were preserved in alcohol. The Campodea were studied in detail after boiling in KOH.

In the determination of these forms the following works were consulted: Material per lo studio dei Tisanuri F. Silvestri Bollettino del Lab. di Zool. Gen. e Agraria, Vol. V, 1911; Nuovi Jeneri e Nuove specie di Campodea by F. Silvestri (Bull. del Lab. di Zool. Gen. e Agr., 1912); Monograph of the Collembola and Thysanura, by Sir John Lubbock, London, 1873; North American Apterygogenea, by Harold Schoett, in Proceedings of California, Academy of Science, Vol. 6; and a large number of others.

## Campodea montis n. sp.

#### (Figs. 1-2)

Several specimens of this species were studied. Color white. The smaller setse of the body are simple, while the larger are well serrated.

*Head*—The head is covered with numerous, simple short setæ. There is a single row of stout short hairs at the base of the head, truncated and slightly plumed. The surface of the labial palpi more than one-third wider than long. (Fig. 2, A). The antennæ have thirty or more

Figure 6. Evalljapyx (F1g. 2, A). The antennæ have thirty or mor propinguus, F. Silvestri.

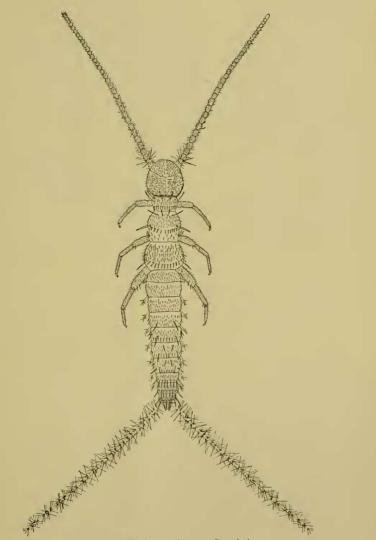


Figure 1. Campodea montis n. sp. Dorsal view.

joints with numerous short simple setæ, with some serrated. The terminal joints of the antennæ are often small, as if recently grown out.

Thorax—The smaller hairs are simple and the larger macrochætæ are longer and serrated. *Pronotum*—There are three pairs of long strong macrochætæ on the pronotum. The longest pair on the cephalic lateral margin. The other two pairs of

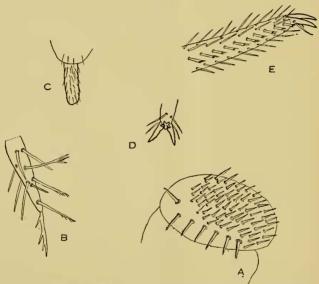


Figure 2. Campodea montis n. sp. A, labial palpus; B, stilus; C, first abdominal appendage; D, under side of foot; E, tibia and claws.

hairs on the cephalic border are not as long as the above. On the rear margin of the pronotum there is a row of short, very thick setæ with flattened points and saw-shaped. *Mesonotum*— Here there are three pairs of long serrated macrochætæ. The longest ones are on the caudal lateral border and are about as long as half the width of the mesonotum. The next long pair of macrochætæ is on the cephalic border and is two-thirds as long as the above. The two medial macrochætæ are half as long as these. *Metanotum*—Only one pair of long macrochætæ on the caudal border. A row of short strong setæ between these two macrochætæ.

Abdomen—First, second and third abdominal terga are without long hairs. The fourth has one pair of long caudal

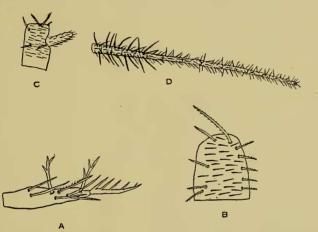


Figure 3. Campodea kelloggi. A, stilus; B, pronotum, dorsal view of one-half; C, first abdominal appendage; D, cercus.

macrochætæ. The fifth tergite has a pair of long macrochætæ and a number about two-thirds as long. The sixth has two and seventh has three pairs of long macrochætæ on each side. The eighth, ninth and tenth terga have eight or nine macrochætæ.

*Feet*—Two claws and no appendages but hairs on the claws. Femur without hairs on the lower side and about fourteen rows of short simple hairs on the upper side. Tibia, about twenty hairs in a row on the upper side. Tarsus short, simple, with strong pointed hairs all the way around. There is one row of short, strong plumed setæ (Fig. B). There is a little pad on bottom of foot (Figs. E & D).

*Cerci*—Nearly as long as abdomen and thorax. They have fourteen joints. They are covered all the way down with quite long and strong seta, some of which are serrated.

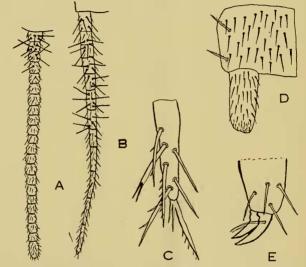


Figure 4. Campodea folsomi. A, antenna; B, cercus; C, stilus; D, first abdominal appendage; E, claws.

Length of body, including head, 5 mm. Width of thorax, 1 mm. Length of cerci, 4 mm. Length of antennæ, 4 mm.

This species I first found in Cucamonga Canyon, northeast of Claremont, under oak leaves in damp earth; later it was found in the hills south of Pomona.

This species resembles *Entrychocampa wilsoni*, described by F. Silvestri. However, it differs very distinctly from this form in that it does not have the large lateral appendices of the

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claws. The cerci and antennæ are much longer, and the stylus is distinct.

## Campodea kelloggi F. Silvestri (Fig. 3)

This species was found in nearly every canyon in the mountains north of Claremont, in Cucamonga, San Antonio, Palmer's, Live Oak and San Dimas, and also in the South Hills below Pomona.

My specimens of this species seemed to vary a little from that described by F. Silvestri. The stylus differed slightly and the pronotum had five long macrochætæ, instead of three (Fig. 3, B).

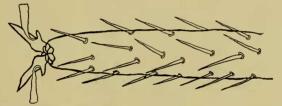


Figure 5. Entrychocampa wilsoni. Tip of foot, showing large appendages on the claws and the pad between the claws.

Campodea folsomi F. Silvestri (Fig. 4)

This species was collected for me by Dr. Hilton from Live Oak Canyon. Although this appears to be almost a distinct form, still it resembles *Campodea folsomi* closely and may at present be termed a variation of this species. The claws (Fig. 4, E) are practically the same as *C. folsomi*, but the stilus (Fig. 4, C) differs slightly in that there are more serrations on the hairs. The cerci differ in that there are twelve or thirteen joints, instead of eleven. The antennæ (Fig. 4, A) differ in that there are twenty-two joints, instead of nineteen. The first abdominal appendage (Fig. 4, D) is slightly different in shape, longer, and not so wide.

#### Entrychocampa wilsoni F. Silvestri

This species I found in Cucamonga and San Dimas canyons, and in the South Hills. It is easily distinguished from the others, because of the lateral appendices on the claws (Fig. 5). One noticeable feature which is shown in the figure is the flower-like organ on the bottom of the foot (Fig. 5).

#### Fam. JAPYGIDÆ

### Evalljapyx propinguus F. Silvestri

#### (Fig. 6)

This species was found in nearly every canyon in the mountains, in Cucamonga, San Antonio, Palmer's, San Dimas, and Live Oak canyons, in Blanchard Park and in the South Hills. It is determined by its forceps. The base of the right is broader than the left. About one-third of the way down on the left is a large tubercle. About two-thirds of the way down on the right there is a large tubercle. From this tooth to the tip it is greatly concave. There are about eleven teeth on the inner side of each of the forceps (Fig. 6).

#### Fam. LEPISMIDÆ

I have several species of the genera Lepisma and Machilis which are not yet determined. Most specimens were found under dry leaves and stones. One species of Lepisma was found on a sycamore tree under the bark.

(Contribution from the Zoological Laboratory of Pomona College.)